

**REMARKS****Application Amendments**

Claims 1-10 are pending in this application and all presently stand rejected. By the amendments presented, the specification has been amended to correct terms which were misspelled. Claims 1 and 10 were previously amended in a Preliminary Amendment filed January 22, 2001. Claim 5 has been amended in view of a statutory 35 U.S.C. 101 double patenting rejection, detailed remarks found below. An objection was raised as the present application does not contain an abstract of the disclosure as required by 37 CFR 1.72 (b). An abstract on a separate sheet has been submitted. No new matter has been added.

**Double Patenting Rejection**

Claims 1-10 have been provisionally rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over Claims 1-10 of copending application No. 09/744,269 in view of Kang et al (WO 97/23194). In setting forth this rejection, the Examiner indicated that a timely filed Terminal Disclaimer over these common owned applications would overcome the rejection.

Responsive to this rejection, a Terminal Disclosure under 37 C.F.R. 1.321(c) for the above-entitled application which specifies that the Petitioner disclaims the terminal part of the statutory term of any patent granted on the above entitled application which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. §154 to §156 and §173 as shortened by any terminal disclaimer filed prior to the grant of any patent granted on pending Application Number 09/744,269, will be immediately submitted upon receipt of the Recordation of the present application. Upon the submission of the Terminal Disclaimer, Applicant will thus obviate the provisional obviousness-type double patenting.

**Statutory Type (35 U.S.C. 101) Double Patenting**

The Examiner has asserted that Claim 5 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of Claim 2 of co-pending Application no. 09/744,269. Accordingly, Applicants have amended Claim 5 of the present invention in order to obviate the statutory type 35 U.S.C. 101 Double Patenting rejection.

**Invention Synopsis**

The present invention is directed to a hair conditioning composition comprising: (1) a carboxylic acid/carboxylate copolymer; (2) an amphoteric conditioning polymer; and (3) an aqueous carrier. The compositions of the present invention provide hair conditioning compositions suitable for leave-on use which provide improved conditioning benefits to the hair such as smoothness, softness, and reduction of friction, are easy to apply on the hair, and leave the hair and hands with a clean feeling.

**Art Rejections****(A) 35 U.S.C. § 102(b)**

Claims 1 and 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Karlen et al (US Patent No. 6,004,545).

Karlen et al disclosing hair cleansing compositions containing from 0.1 to 30 percent by weight of a dimethylsiloxanemethyl-3-mercaptopropylsiloxane/isobutylmethacrylate copolymer and from 3 to 50 percent by weight of at least one detergent surfactant. The composition can also contain dimethylsiloxane and glycol copolymers and or polydimethylsiloxanes with or without hydroxy terminal groups. This composition has a definite fixing effect as well as satisfactory hair cleaning action.

However, Karlen et al does not disclose nor suggest a leave-on hair conditioning composition of the present invention, as now amended. Further, none of the polymers disclosed in Karlen et al is a carboxylic acid/carboxylate copolymers as required in the present invention and now amended. Carbopol 1342 as disclosed in Karlen et al is a homopolymer of acrylic acid crosslinked with an allyl ether of pentaerythritol, an allyl ether of sucrose, or allyl ether of propylene. Karlen et al does not disclose or suggest the use of a carboxylic acid/carboxylate copolymer of the present invention. The benefit of the present invention is due to this carboxylic acid/carboxylate copolymer which, together with other required elements, provides favorable aesthetic benefits, conditioning benefits such as smoothness and softness, and leaves the hair and hands with clean feeling when the composition of the present invention is intended for use as leave-on products. However, Karlen et al does not disclose or suggest the benefit of the present invention such as leaving the hair and hands with clean feeling when the composition of the present invention is intended for use as leave-on products, nor the relationship between the benefit and the use of carboxylic acid/carboxylate copolymer. Thus, Karlen et al does not disclose and provides no motivation to select some components included in shampoo-conditioning compositions for providing a leave-on hair conditioning composition of the present invention, nor to use a carboxylic acid/carboxylate copolymer in the composition.

**(B) 35 U.S.C. § 103(a)**

Claims 1-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Karlen et al (US Patent No. 6,004,545) in view of Hitchen (US Patent No. 6,106,816), Kang et al (WO 97/23194) and Rath et al (US Patent No. 5,993,792).

The Examiner has asserted that while Karlen et al. teaches hair cleansing compositions comprising copolymers of carboxylic acid such as Carbopol 1342, amphoteric conditioning polymers, aqueous carriers and silicon compounds, Karlen et al does not teach a humectant, a viscosity modifier, a visible particle, an UV absorber, an optical brightener, and herbal extract and conditioning agents. The Examiner asserts that it would have been prima facie obvious to a person of skill in the art to add Merquat 100 to the composition of Karlen et al to achieve the benefit of an additional conditioning agent in view of Hitchen and to further add visible particles, a humectant and viscosity modifiers

of Kang et al to the composition of Karlen et al to achieve the benefit of stabilizing and ensuring the homogenous dispersion of a hair cleansing composition.

Karlen et al does not disclose nor suggest a leave-on hair conditioning composition of the present invention, as now amended. Further, none of the polymers disclosed in Karlen et al is a carboxylic acid/carboxylate copolymers as required in the present invention and now amended. Carbopol 1342 as disclosed in Karlen et al is a homopolymer of acrylic acid crosslinked with an allyl ether of pentaerythritol, an allyl ether of sucrose, or allyl ether of propylene. Karlan et al does not disclose or suggest the use of a carboxylic acid/carboxylate copolymer for the present invention, as now amended.

Kang et al relates to shampoo-conditioning compositions. Kang et al discloses in Example 1 a shampoo composition comprising Unishpere, dimethicone and some polymers such as PVM/MA Decadiene Crosspolymer. Kang et al also discloses shampoo compositions containing Carbomer in comparative examples. However, Kang et al does not disclose nor suggest a leave-on hair conditioning composition of the present invention, as now amended. Further, none of the polymers disclosed in Kang et al is a carboxylic acid/carboxylate copolymers as required in the present invention. Carbomer as disclosed in Kang et al is a homopolymer of acrylic acid crosslinked with an allyl ether of pentaerythritol, an allyl ether of sucrose, or allyl ether of propylene. Kang et al does not disclose or suggest the use of a carboxylic acid/carboxylate copolymer. The benefit of the present invention is due to this carboxylic acid/carboxylate copolymer which, together with other required elements, provides favorable aesthetic benefits, conditioning benefits such as smoothness and softness, and leaves the hair and hands with clean feeling when the composition of the present invention is intended for use as leave-on products. However, Kang et al does not disclose or suggest the benefit of the present invention such as leaving the hair and hands with clean feeling when the composition of the present invention is intended for use as leave-on products, nor the relationship between the benefit and the use of carboxylic acid/carboxylate copolymer. Thus, Kang et al provides no motivation to select some components included in shampoo-conditioning compositions for providing a leave-on hair conditioning composition of the present invention, nor to use a carboxylic acid/carboxylate copolymer in the composition. According, it would not be obvious to those of skill in the art to provide a hair conditioning composition of the present invention, by the disclosure of Kang et al.

Applicant recognizes the Examiner's citation that Kang et al discloses Carbopol 1342 on page 13, line 5. However, Applicant believes that as stated on page 13, lines 1-2, that the Carbopol 1342 was simply being used as a component of a control shampoo composition, as shown in Comparative Examples 1 to 4, used for stability testing. As disclosed on page 14, lines 25-33, Kang et al teaches that the comparative examples,

which use the Carbopol 1342, are less stable when compared to the Kang et al examples using the PVM/MA Decadiene Crosspolymer. Therefore, Kang et al is further teaching away from the use of the Carbopol-1342 due to less stability. Clearly, one of skill in the art would not be led to present invention, by the teachings of Kang et al in combination with the other references.

Further, the broad teaching in Hitchen disclosing the use of cationic polymeric conditioning agents in shampoo compositions and the further general teaching in Rath et al of the use of optical brighteners, herbal extracts and UV absorbers would not lead one of skill in the art to the leave-in conditioners of the present invention. The benefit of the present invention is due to this carboxylic acid/carboxylate copolymer which, together with other required elements, provides favorable aesthetic benefits, conditioning benefits such as smoothness and softness, and leaves the hair and hands with clean feeling when the composition of the present invention is intended for use as leave-on products. Further, Kang et al teaches away from the present invention, and would not lead one of skill in the art to combine the teachings found in Kang et al with that of Karlen et al, Hitchen et al or Rath et al.

Karlen et al does not disclose nor suggest a leave-on hair conditioning composition of the present invention, as now amended. Further, none of the polymers disclosed in Karlen et al is a carboxylic acid/carboxylate copolymers as required in the present invention and now amended. Carbopol 1342 as disclosed in Karlan et al is a homopolymer of acrylic acid crosslinked with an allyl ether of pentaerythritol, an allyl ether of sucrose, or allyl ether of propylene. Karlen et al does not disclose or suggest the use of a carboxylic acid/carboxylate copolymer of the present invention.

Applicants respectfully submit that Karlen et al does not meet the limitations set forth in the present invention and further would not render the present invention as obvious when combined with the teachings of Kang et al, Hitchen and Rath et al. In particular, none of the polymers disclosed in Karlen et al is a carboxylic acid/carboxylate copolymer as required in the present invention. Therefore, one of ordinary skill in the art would not have been lead to modify the compositions of Karlen et al by adding or combining the "further comprising" ingredients as disclosed in Kang et al, Hitchen and Rath et al.

Further, Kang et al actually teaches away from the present invention by demonstration the instability of compositions comprising Carbopol 1342. Therefore, one of skill in the art would not be lead by the teaching of Kang et al to combine the teachings of Karlen et al, Hitchen, or Rath et al because one would not have a reasonable expectation to succeed in achieving or improving the properties of the composition.

**No Prima Facie Case**

Applicant respectfully traverses this obvious rejection as Karlen et al in view of Kang et al, Hitchen, and Rath et al does not establish a prima facie case of obviousness because they do not teach or suggest all of the Applicant's claim limitations. None of the of the polymers disclosed in Karlen et al are a carboxylic acid/carboxylate copolymers as required in the present invention. Further, Carbomer as disclosed in Kang et al is a homopolymer of acrylic acid crosslinked with an allyl ether of pentaerythritol, an allyl ether of sucrose, or allyl ether of propylene. Therefore, one of ordinary skill in the art would not have been lead to modify the compositions of Karlen et al by adding or combining amphoteric conditioners or additional conditioning agents as taught by Kang et al. Therefore, there is no prima face case of obviousness since none of the references, either alone or when combined, teach or suggest all of the Applicant's claim limitations with regard to the claimed requirements.

In light of the arguments presented herein, it is respectfully submitted that the rejection of the claims under 35 U.S.C. § 103(a) be withdrawn.

**Conclusions**

Applicants have made an earnest effort to place their application in proper form and distinguish their claimed invention from the prior art which was applied in the July 2, 2001 Office Action. WHEREFORE, consideration of this application, withdrawal of the rejections under 35 U.S.C § 102 and 103(a), and allowance of Claims 1-10 are respectfully requested.

Respectfully submitted,

Takashi Sako

Bruce Cox

By 

Linda M. Sivik

Agent for Applicants

Registration No. 44,982

(513) 626-4122

Customer No. 27752

May 14, 2003